From: Stuble, Bill
To: rsteen@airsci.com; Potter, Dolly
Cc: Skogley, Bob
Subject: RE: Multi-pollutant BACT
Date: Tuesday, January 27, 2004 11:30:26 AM

Roger:

Very interesting. On your first question, "were you to determine that CO was not an interferant?" and your suggestion "demonstrate …. (as Kevin Davis contends) that the FGR CO was combusted in the furnace, that the furnace exhaust was more like 500 ppm, that SNCR would get 35% NOx removal efficiency", that would best be done by modeling. That would take several thousand dollars and a month of delay including the time required for Detroit Stoker and Fuel Tech to modify their emission warranties.

The followup letter to the state could say that we mistakenly overlooked the combustion of the calciner offgas CO in the lower part of the furnace. We might also be able to say that some of the VOC's in the FGR are removed by combustion, if that were included in the model work.

-- Bill

From: Rodger Steen [mailto:rsteen@airsci.com]
Sent: Monday, January 26, 2004 5:06 PM
To: Potter, Dolly; Stuble, Bill
Subject: Multi-pollutant BACT

Dolly and Bill, I am working with the data we already have in hand and coming to the conclusion that if CO is in fact going to be an interference for SNCR that installation of the combination of SNCR and RTO results in a NOx + VOC cost to control of about $6,000 per ton. This cost is in the "maybe" range for being designated BACT. I am assuming that DEQ considers a ton of VOC and a ton of NOx of equal importance to the air basin. On the other hand, assuming that SNCR really is at a cost of $1500 - $2000 per ton controlled, and you were to determine that CO was not an interferant, you would surely be required to install SNCR, but then RTO would be looked at as an incremental cost over SNCR and would be on the order of $8,000 per ton, which I believe is above the BACT range.

In short, Solvay may be better off if they could 1) demonstrate to themselves (as Kevin Davis contends) that the FGR CO was combusted in the furnace, that the furnace exhaust was more like 500 ppm, that SNCR would get 35% NOx removal efficiency, and de-couple the two pollutants. If they remain coupled, there is a fair chance that DEQ will determine that both controls will be required for BACT. I suggest getting a more thorough response from Kevin.

As I assemble the numbers it becomes apparent that BACT is probably going to be either SNCR or SNCR/RTO combined.

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